

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,037	04/04/2001	Dmitry Mikhailov	4F01.1-010	3788

35725 7590 08/09/2004  
MEHRMAN LAW OFFICE, P.C.  
ONE PREMIER PLAZA  
5605 GLENRIDGE DRIVE, STE. 795  
ATLANTA, GA 30342

EXAMINER

HUTTON JR, WILLIAM D

ART UNIT	PAPER NUMBER
----------	--------------

2179

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/826,037	MIKHAILOV ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Doug Hutton	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Specification***

The disclosure is objected to because of the following informalities:

- the term "published" on Page 11, Line 15 should be amended to — publishes — so that the sentence is grammatically correct;
- the term "uploader" on Page 15, Line 6 should be amended to — loader — because that is how the element is previously identified;
- the number "814" on Page 22, Line 21 should be amended to — 816 — because the number appears to be incorrect (see Figure 8);
- the numbers "816" on Page 22, Lines 21 and 24 should be amended to — 818 — because the numbers appear to be incorrect (see Figure 8);
- the numbers "818" on Page 22, Lines 24 and 26 should be amended to — 820 — because the numbers appear to be incorrect (see Figure 8); and
- the number "820" on Page 22, Line 21 should be amended to — 822 — because the number appears to be incorrect (see Figure 8).

Appropriate correction is required.

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: 63 (see Specification – Page 12, Line 22) and 1032 (see Page 26, Lines 13, 21, 25 and 29).

The drawings are objected to because the reference number “1030” in Figure 11 should be amended to — 1028 — because that is the proper reference number for the “process submission” routine (see Figure 10).

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 6 is objected to because of the following informalities:

Art Unit: 2179

- the term “forms” in Line 4 should be amended to — reports — because it is the reports wizard that creates the report.

Claim 9 is objected to because of the following informalities:

- the term “published” in Line 6 should be amended to — publisher — because it appears to be a typographic error.

Claim 16 is objected to because of the following informalities:

- the term “submission” should be inserted between the terms “data” and “field” in Line 5 because that is how the element is previously identified (see Lines 2-3);
- the term “published” in Line 8 should be amended to — publisher — because it appears to be a typographic error;
- the term “schema” in Line 13 should be amended to — structure — because that is how the element is previously identified (see Line 12);
- the term “table” in Line 21 should be deleted because no database “table” is previously mentioned in the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2179

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

*Claim 23:*

The claim recites the limitation "an interface system operable for receiving service definitions from one or more user communication devices selected from the group *including:*" in Lines 1-3. This limitation is indefinite because it is unclear whether the interface system receives service definitions from **every** device listed in the group or only **one** of the devices listed in the group.

The limitation appears to be of the "Markush group" variety. For purposes of examination, the examiner will interpret the limitation to mean that the interface system receives service definitions from any single device listed in the group.

Applicant may obviate this rejection by amending the term "including" in Line 3 to — consisting of —.

*Claim 24:*

The claim recites the limitation "wherein the document handler is operable for processing documents in a format selected from the group *including:*" in Lines 1-3. This limitation is indefinite because it is unclear whether the document handler is operable for **every** format listed in the group or only **one** of the formats listed in the group.

The limitation appears to be of the "Markush group" variety. For purposes of examination, the examiner will interpret the limitation to mean that the document handler is operable for any single format listed in the group.

Applicant may obviate this rejection by amending the term "including" in Line 3 to — consisting of —.

*Claim 24:*

The claim recites the limitation "wherein the document handler is operable for processing documents in a format selected from the group *including*:" in Lines 1-3. This limitation is indefinite because it is unclear whether the document handler is operable for **every** format listed in the group or only **one** of the formats listed in the group.

The limitation appears to be of the "Markush group" variety. For purposes of examination, the examiner will interpret the limitation to mean that the document handler is operable for any single format listed in the group.

Applicant may obviate this rejection by amending the term "including" in Line 3 to — consisting of —.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –



Art Unit: 2179

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by

Jennings, Roger – Special Edition Using Microsoft Access 2000, Chapter 2 – ***Building Your First Access 2000 Application***; Chapter 4 – ***Working with Access Databases and Tables***; Chapter 5 – ***Entering, Editing, and Validating Data in Tables***; Chapter 9 – ***Understanding Query Operators and Expressions***; Chapter 12 – ***Creating and Using Forms***; Chapter 14 – ***Printing Basic Reports and Mailing Labels***; Chapter 15 – ***Preparing Advanced Reports***; Chapter 16 – ***Working with Hyperlinks and HTML***, “*Using Hyperlinks with Access Controls*” (Que Publishing, 5 May 1999).

*Claim 1:*

Jennings discloses a method for handling forms (see Chapter 12 – “*Creating and Using Forms*” – Jennings discloses a method for handling forms, as clearly indicated in the cited text), comprising the steps of:

- receiving a form from a form publisher comprising one or more data submission fields configured to receive user input (see Chapter 12, “*Creating a Transaction-Processing Form with the Form Wizard*” – Jennings discloses this limitation in that it allows the user to create a form comprising fields into which data is entered);
- processing the form to identify the data submission fields (see Chapter 12, “*Using Transaction-Processing Forms*” – Jennings discloses this limitation in that,

when the user loads the form and enters data into the form, it “processes” the form to “identify” the data submission fields);

- correlating each data field to a database field type supported by a database application (see Chapter 12, “*Creating a Transaction-Processing Form with the Form Wizard*”; see Chapter 12, “*Using Transaction-Processing Forms*” – Jennings discloses this limitation in that, when the user creates the form, Access automatically “correlates” the data fields of the form to the corresponding data field type of the database);
- creating one or more database tables or other database structures in the database application corresponding to the form (see Chapter 2, “*Creating an Access Application from a Template File*”; see Chapter 2, “*Touring the Contact Management Application*” – Jennings discloses this limitation in that the user creates the tables that correspond to the created form), the structure comprising a storage element corresponding to each data submission field (Jennings discloses this limitation in that it includes tables comprising database storage elements that correspond to the data submission fields of the form);
- publishing the form to receive form submissions comprising data entries into the data submission fields (see Chapter 12, “*Using Transaction-Processing Forms*” – Jennings discloses this limitation in that, when the user loads the form, the form is “published” to the user so that the user can enter data into the form);

Art Unit: 2179

- receiving one or more form submissions (see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that the user enters data into the form); and
- entering the data entries of the form submissions into the corresponding storage elements of the database (see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that the data entered into the form fields by the user is stored in the corresponding database table fields).

*Claim 2:*

Jennings discloses the method of Claim 1, further comprising the steps of:

- receiving a report file associated with the form (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access automatically creates, or allows a user to create, a report that is "associated with" the form), the report file comprising report elements associated with the storage elements of the database (Jennings discloses this limitation in that the reports created in Access are "associated with" the corresponding tables);
- computing the report elements from the data entries associated with the storage elements of the database (see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access allows the user to perform calculations in reports);

- rendering the report (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access "renders" reports); and
- delivering the report to a specified location (see Chapter 15, *"Mailing Report Snapshots"* – Jennings discloses this limitation in that it allows the user to email a "Report Snapshot" and publish a report on the Internet).

*Claim 3:*

Jennings discloses the method of Claim 1, wherein the step of receiving the form comprises the step of uploading the form from a remote form publisher (see Chapter 16, *"Using Hyperlinks with Access Controls"* – Jennings discloses this limitation in that it allows the user to open a form using a hyperlink; thus, the form is "uploaded from a remote form publisher").

*Claim 4:*

Jennings discloses the method of Claim 1, wherein the step of receiving the form comprises the step of:

- launching a forms wizard uploading (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"* – Jennings discloses this limitation in that Access includes a form wizard); and
- receiving user commands to the forms wizard to create the form (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"* – Jennings

Art Unit: 2179

discloses this limitation in that the form wizard receives commands from the user and creates the forms).

*Claim 5:*

Jennings discloses the method of Claim 2, wherein the step of receiving the report comprises the step of uploading the report from a remote form publisher (see Chapter 16, *"In the Real World – To Internet or Not"* – Jennings discloses this limitation in that it allows the user to distribute reports via the Internet).

*Claim 6:*

Jennings discloses the method of Claim 2, wherein the step of receiving the report comprises the step of:

- launching a reports wizard uploading (see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access includes a report wizard); and
- receiving user commands to the reports wizard to create the form (see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that the report wizard receives commands from the user and creates the reports).

*Claim 7:*

Jennings discloses the method of Claim 1, wherein the step of processing the form to identify the data submission fields comprises the steps of:

- parsing the form to identify the data submission fields (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "parses" the form and "identifies" data fields as the user creates and uses the form);
- determining a field type associated with each data submission field (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "determines a field type" for each data field as the user creates and uses the form); and
- determining a name associated with each data submission field (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "determines a name" for each data field as the user creates and uses the form).

*Claim 8:*

Jennings discloses the method of Claim 1, wherein the step of correlating each data field to a database field type supported by a database application comprises the steps of:

- determining a field type associated with each data submission field (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "determines a field type" for each data field as the user creates and uses the form);
- looking up a selected database field type corresponding to each data submission field (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "looks up" the corresponding database field type for each form data field as the user creates and uses the form); and
- correlating each data submission fields with its corresponding selected database field type (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "correlates" the corresponding database field type for each form data field as the user creates and uses the form).

*Claim 9:*

Jennings discloses the method of Claim 1, wherein the step of correlating each data field to a database field type supported by a database application comprises the steps of:

- determining a field type associated with each data submission field (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "determines a field type" for each data field as the user creates and uses the form);
- looking up a default database field type and a list of database field type options corresponding to each data submission field (see Chapter 4, *"Choosing Field Data Types, Sizes, and Formats"* – Jennings discloses this limitation in that Access automatically assigns a default field data type to each table unless the user assigns a specific field data type; when the user creates the corresponding form, Access assigns the data type of each field to the corresponding form data field);
- prompting the form publisher to enter a selected database field type from the list of database field type options for each data submission field (see Chapter 4, *"Choosing Field Data Types, Sizes, and Formats"* – Jennings discloses this limitation in that Access "prompts" the user to assign a specific field data type to each field of the table; when Access does this, it also prompts the user to select a field type for each form field); and



- correlating each data submission field with its corresponding selected database field type (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"*; see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that Access "correlates" the corresponding database field type for each form data field as the user creates and uses the form).

*Claim 10:*

Jennings discloses the method of Claim 1, further comprising the steps of:

- receiving a report file associated with the form (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access automatically creates, or allows a user to create, a report that is "associated with" the form), the report file comprising report elements associated with the storage elements of the database structure (Jennings discloses this limitation in that the reports created in Access are "associated with" the corresponding tables);
- receiving a service definition comprising instructions for producing and delivering reports based on the report file (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"*; see Chapter 15, *"Mailing Report Snapshots"* – Jennings discloses this limitation in that, as the user creates the report, Access is "receiving instructions" for producing the report; thus, the user instructs Access

concerning the format and content of the report; Jennings also discloses this limitation in that it allows the user to email a "Report Snapshot" and publish a report on the Internet; thus, the user instructs Access concerning the delivery of the report);

- determining from the instructions that a report should be generated (see Chapter 15, *"Mailing Report Snapshots"* – Jennings discloses this limitation in that it allows the user to email a "Report Snapshot" and publish a report on the Internet; thus, Access "determines from instructions" that a report should be generated and delivered per the user's instruction);
- computing the report elements from the data entries associated with the storage elements of the database structure (see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access allows the user to perform calculations in reports);
- rendering the report (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access "renders" reports); and
- delivering the report to a specified location (see Chapter 15, *"Mailing Report Snapshots"* – Jennings discloses this limitation in that it allows the user to email a "Report Snapshot" and publish a report on the Internet).

*Claim 11:*

Jennings discloses the method of Claim 1, further comprising the steps of:

- forwarding the form submissions to the form publisher for review (see Chapter 5, *"Validating Data Entry"* – Jennings discloses this limitation in that Access will not allow an invalid entry into a form field; thus, the "form submissions" are "reviewed by the form publisher"); and
- receiving approval of the form submissions prior to entering the data entries of the form submissions into the corresponding storage elements of the database structure (see Chapter 5, *"Validating Data Entry"* – Jennings discloses this limitation in that Access allows valid entries into a form field; thus, the "form submissions" must "received approval" prior to entry).

*Claim 12:*

Jennings discloses the method of Claim 1, further comprising the steps of:

- receiving form logic defining conditions associated with the receipt of form submissions using the form (see Chapter 4, *"Understanding the Properties of Tables and Fields"* – Jennings discloses this limitation in that Access allows the user to set a form field to "Required", which requires the user of the form to enter a value for the form field; Access also allows the user to set "Validation Rules" that apply to values entered into fields);
- saving the form logic in association with the database structure corresponding to the form (see Chapter 4, *"Understanding the Properties of Tables and Fields"* – Jennings discloses this limitation in that, when the user creates the table and associated form, Access saves the form properties entered by the user); and

Art Unit: 2179

- applying the form logic when receiving form submissions using the form (see Chapter 4, *"Understanding the Properties of Tables and Fields"* – Jennings discloses this limitation in that, as the user is entering data into the form, Access "applies the form logic").

*Claim 13:*

Jennings discloses the method of Claim 12, wherein the form logic comprises:

- conditions defining valid data entries for individual data submission fields (as explained in the above rejection for Claim 12, Jennings discloses this limitation); and
- conditions defining a valid form submission based on a combination of data entries for several data submission fields (see Chapter 9, *"Creating Access Expressions"* – Jennings discloses this limitation in that Access allows a user to construct an expression for validating data that is dependent upon other values entered into the form fields; thus, the expressions "define a valid submission" based on a "combination of data entries").

*Claim 14:*

This claim merely recites computer software that performs the method of Claim

1. Thus, Jennings discloses every limitation of this claim using the same rationale explained in the above rejection for Claim 1.

*Claim 15:*

This claim merely recites an apparatus that performs the method of Claim 1. Thus, Jennings discloses every limitation of this claim using the same rationale explained in the above rejection for Claim 1.

*Claim 16:*

Jennings discloses a method for handling forms (see Chapter 12 – “*Creating and Using Forms*” – Jennings discloses a method for handling forms, as clearly indicated in the cited text), comprising the steps of:

- receiving a form from a form publisher comprising one or more data submission fields configured to receive user input (see Chapter 12, “*Creating a Transaction-Processing Form with the Form Wizard*” – Jennings discloses this limitation in that it allows the user to create a form comprising fields into which data is entered);
- correlating each data submission field to a database field type supported by a database application (see Chapter 12, “*Creating a Transaction-Processing Form with the Form Wizard*”; see Chapter 12, “*Using Transaction-Processing Forms*” – Jennings discloses this limitation in that, when the user creates the form, Access automatically “correlates” the data fields of the form to the corresponding data field type of the database) by determining a field type associated with each data submission field (see Chapter 12, “*Creating a Transaction-Processing Form with the Form Wizard*”; see Chapter 12, “*Using Transaction-Processing Forms*” –

Jennings discloses this limitation in that Access “determines a field type” for each data field as the user creates and uses the form), looking up a default database field type and a list of database field type options corresponding to each data submission field (see Chapter 4, “*Choosing Field Data Types, Sizes, and Formats*” – Jennings discloses this limitation in that Access automatically assigns a default field data type to each table unless the user assigns a specific field data type; when the user creates the corresponding form, Access assigns the data type of each field to the corresponding form data field), prompting the form publisher to enter a selected database field type from the list of database field type options for each data submission field (see Chapter 4, “*Choosing Field Data Types, Sizes, and Formats*” – Jennings discloses this limitation in that Access “prompts” the user to assign a specific field data type to each field of the table; when Access does this, it also prompts the user to select a field type for each form field), and correlating each data submission field with its corresponding selected database field type (see Chapter 12, “*Creating a Transaction-Processing Form with the Form Wizard*”; see Chapter 12, “*Using Transaction-Processing Forms*” – Jennings discloses this limitation in that Access “correlates” the corresponding database field type for each form data field as the user creates and uses the form);

- creating a database structure in the database application corresponding to the form (see Chapter 2, “*Creating an Access Application from a Template File*”; see Chapter 2, “*Touring the Contact Management Application*” – Jennings discloses

this limitation in that the user creates the tables that correspond to the created form), the structure comprising a storage element corresponding to each data submission field (Jennings discloses this limitation in that it includes tables comprising database storage elements that correspond to the data submission fields of the form);

- publishing the form to receive form submissions comprising data entries into the data submission fields (see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that, when the user loads the form, the form is "published" to the user so that the user can enter data into the form);
- receiving one or more form submissions (see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that the user enters data into the form);
- entering the data entries of the form submissions into the corresponding storage elements of the database (see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that the data entered into the form fields by the user is stored in the corresponding database table fields);
- receiving a report file associated with the form (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access automatically creates, or allows a user to create, a report that is "associated with" the form), the report file comprising report elements associated with the storage

elements of the database (Jennings discloses this limitation in that the reports created in Access are “associated with” the corresponding tables);

- receiving a service definition comprising instructions for producing and delivering reports based on the report file (see Chapter 2, “*Touring the Contact Management Application*”; see Chapter 14, “*Creating a Grouping Report with the Report Wizard*”; see Chapter 15, “*Mailing Report Snapshots*” – Jennings discloses this limitation in that, as the user creates the report, Access is “receiving instructions” for producing the report; thus, the user instructs Access concerning the format and content of the report; Jennings also discloses this limitation in that it allows the user to email a “Report Snapshot” and publish a report on the Internet; thus, the user instructs Access concerning the delivery of the report);
- determining from the instructions that a report should be generated (see Chapter 15, “*Mailing Report Snapshots*” – Jennings discloses this limitation in that it allows the user to email a “Report Snapshot” and publish a report on the Internet; thus, Access “determines from instructions” that a report should be generated and delivered per the user’s instruction);
- computing the report elements from the data entries associated with the storage elements of the database (see Chapter 14, “*Creating a Grouping Report with the Report Wizard*” – Jennings discloses this limitation in that Access allows the user to perform calculations in reports);



- rendering the report (see Chapter 2, "*Touring the Contact Management Application*"; see Chapter 14, "*Creating a Grouping Report with the Report Wizard*" – Jennings discloses this limitation in that Access "renders" reports); and
- delivering the report to a specified location (see Chapter 15, "*Mailing Report Snapshots*" – Jennings discloses this limitation in that it allows the user to email a "Report Snapshot" and publish a report on the Internet).

*Claim 17:*

Jennings discloses the method of Claim 16, further comprising the steps of:

- forwarding the form submissions to the form publisher for review (see Chapter 5, "*Validating Data Entry*" – Jennings discloses this limitation in that Access will not allow an invalid entry into a form field; thus, the "form submissions" are "reviewed by the form publisher"); and
- receiving approval of the form submissions prior to entering the data entries of the form submissions into the corresponding storage elements of the database structure (see Chapter 5, "*Validating Data Entry*" – Jennings discloses this limitation in that Access allows valid entries into a form field; thus, the "form submissions" must "received approval" prior to entry).

*Claim 18:*

Jennings discloses the method of Claim 16, further comprising the steps of:

- receiving form logic defining conditions associated with the receipt of form submissions using the form (see Chapter 4, "*Understanding the Properties of Tables and Fields*" – Jennings discloses this limitation in that Access allows the user to set a form field to "Required", which requires the user of the form to enter a value for the form field; Access also allows the user to set "Validation Rules" that apply to values entered into fields);
- saving the form logic in association with the database structure corresponding to the form (see Chapter 4, "*Understanding the Properties of Tables and Fields*" – Jennings discloses this limitation in that, when the user creates the table and associated form, Access saves the form properties entered by the user); and
- applying the form logic when receiving form submissions using the form (see Chapter 4, "*Understanding the Properties of Tables and Fields*" – Jennings discloses this limitation in that, as the user is entering data into the form, Access "applies the form logic").

*Claim 19:*

Jennings discloses the method of Claim 18, wherein the form logic comprises:

- conditions defining valid data entries for individual data submission fields (as explained in the above rejection for Claim 12, Jennings discloses this limitation); and
- conditions defining a valid form submission based on a combination of data entries for several data submission fields (see Chapter 9, "*Creating Access*

*Expressions* – Jennings discloses this limitation in that Access allows a user to construct an expression for validating data that is dependent upon other values entered into the form fields; thus, the expressions “define a valid submission” based on a “combination of data entries”).

*Claim 20:*

This claim merely recites computer software that performs the method of Claim 16. Thus, Jennings discloses every limitation of this claim using the same rationale explained in the above rejection for Claim 16.

*Claim 21:*

This claim merely recites an apparatus that performs the method of Claim 16. Thus, Jennings discloses every limitation of this claim using the same rationale explained in the above rejection for Claim 16.

*Claim 22:*

Jennings discloses a computer-readable medium storing computer-executable instructions, comprising:

- a document handler operable for receiving forms and associated report files, each form comprising one or more data submission fields configured to receive user input (see Chapter 12, “*Creating a Transaction-Processing Form with the Form Wizard*” – Jennings discloses this limitation in that Access allows the user

to create a form comprising fields into which data is entered), and each report file comprising report elements associated with the data submission fields of a corresponding form (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that the reports created in Access are "associated with" the corresponding forms);

- a forms database operable for storing a plurality of forms received through the document handler (see Chapter 12, *"Creating a Transaction-Processing Form with the Form Wizard"* – Jennings discloses this limitation in that Access stores the forms created by the user);
- a reports database operable for storing a plurality of reports received through the document handler (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"* – Jennings discloses this limitation in that Access stores the reports created by the user);
- a table loader operable for creating a database structure corresponding to each form (see Chapter 2, *"Creating an Access Application from a Template File"*; see Chapter 2, *"Touring the Contact Management Application"* – Jennings discloses this limitation in that the user creates the tables that correspond to the created form), each database structure comprising a storage element corresponding to each data submission field in a corresponding form (Jennings discloses this

limitation in that it includes tables comprising database storage elements that correspond to the data submission fields of the form);

- a forms manager operable for receiving one or more form submissions associated with each form (see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that the user enters data into the form) and entering data entries received through each form submission into the corresponding database structure (see Chapter 12, *"Using Transaction-Processing Forms"* – Jennings discloses this limitation in that the data entered into the form fields by the user is stored in the corresponding database table fields); and
- the forms manager further operable for receiving a service definition associated with each form, and for producing and delivering reports based on the report file and database table corresponding to each form in accordance with instructions contained in a corresponding service definition (see Chapter 2, *"Touring the Contact Management Application"*; see Chapter 14, *"Creating a Grouping Report with the Report Wizard"*; see Chapter 15, *"Mailing Report Snapshots"* – Jennings discloses this limitation in that, as the user creates the table and the corresponding form and report, Access is "receiving instructions" for producing the report; thus, the user instructs Access concerning the format and content of the report; Jennings also discloses this limitation in that it allows the user to email a "Report Snapshot" and publish a report on the Internet; thus, the user instructs Access concerning the delivery of the report).

Art Unit: 2179

*Claim 23:*

Jennings discloses the computer-readable medium of Claim 22, further comprising:

- an interface system operable for receiving service definitions from one or more user communication devices selected from the group consisting of:
  - a landline telephone;
  - a wireless telephone;
  - a computer; and
  - a digital broadband device (Jennings discloses this limitation in that Access is used on a computer).

*Claim 24:*

Jennings discloses the computer-readable medium of Claim 22, wherein the document handler is operable for processing documents in a format selected from the group consisting of:

- an HTML document;
- a PDF document;
- an XML document; and
- a word processing document (see Chapter 15, "*Mailing Report Snapshots*" – Jennings discloses this limitation in that Access allows the user to publish a report in an HTML format on the Internet).

Art Unit: 2179

*Claim 25:*

This claim merely recites an apparatus that includes the computer storage medium of Claim 22. Thus, Jennings discloses every limitation of this claim using the same rationale explained in the above rejection for Claim 22.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Bialic, U.S. Patent No. 6,665,685; D'Souza et al., U.S. Patent No. 6,415,284; Shewmake et al., U.S. Patent Application Publication No. US 2003/0208108; Apte et al., U.S. Patent No. 5,970,464; and Anand et al., U.S. Patent No. 5,832,496.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doug Hutton whose telephone number is (703) 305-1701. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (703) 308-5186. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Application/Control Number: 09/826,037

Page 30

Art Unit: 2179

WDH

August 3, 2004

A handwritten signature in black ink, appearing to read 'Doug Hutton', with a stylized, sweeping flourish extending to the right.

**DOUG HUTTON  
PATENT EXAMINER  
TECH CENTER 2100**